Lesson 6
Search and Location Techniques

Stations 1 & 2
Hailing Search Method

GENERAL INSTRUCTIONS:

- The primary instructor and assistant must identify a location, before the lesson, suitable for this exercise. The area should be large enough to accommodate the exercise, yet all participants must be visible to the instructors. The instructor must speak loud enough to overcome any existing noise in the area, yet clear enough for all participants to understand. Scene safety must be considered at all times. Instructors and participants will wear all appropriate personal protective equipment. A safety officer will be assigned as needed.

- The instructors must check all equipment, tools and accessories prior to the exercise, making sure that they are in working order and that all components are accounted for. They must also ensure that all the equipment needed is available and in place at the practice site before the exercise begins. At the end of the exercise they must ensure that all equipment, trash and debris is cleaned and properly stored.

- The tools and accessories used in this exercise differ greatly from those in the other lessons. Tools used in this exercise will primarily be covered in previous lessons (such as basic hand tools, building marking supplies and alerting devices). The Site Sketch Form and the Collapsed Structure Search Data Form will be discussed in the classroom and utilised in the field exercises. Expect the participants to make mistakes and review them later in the closing. (The participants need time to familiarize themselves with the form, which may later be modified by their organisation to meet their needs.)

- The participants will be grouped into teams of twelve (or two squads) at each station. The station is broken down into two parts: the **Hailing Method** and the **Line Search.** The rationale is to teach the team coordination using a simple technique then proceed to a more advanced mobile technique, in which hailing will also be used. Follow the progression as directed in the procedure below.

- The instructor must be clear in explaining how to proceed with the exercise and what is to be accomplished. He/she must ensure they follow the same steps discussed in lecture, and that the participants do not deviate from the demonstration/explanation, in order to keep within lesson objectives. The instructors will briefly demonstrate the proper technique first (keep the demonstration brief). Next, the participants will practice the proper technique, using all available tools, equipment and forms learned up to this point in the course. The instructors will evaluate individual and team performance, and review them later in the classroom setting.

- The instructors will ensure that building markings are on the structure, as per the previous lesson, and must post a flipchart paper (or similar) so the participants have a place to properly mark or label their findings.

- An instructor must be inside the structure searched in order to respond with noise or verbally to the participants' instructions, and be located. A remote control noise device will be suitable.

- Do not spend time reviewing what was previously discussed in lecture. Briefly answer pertinent questions and move on. Time is limited. Have participants save questions and leave clarifications until the lesson review by the lead instructor. Plan your time wisely.

PURPOSE:

The participants will learn to use the necessary tools, equipment and accessories, and apply the appropriate search technique to the situation presented (simulation), working in a coordinated manner as a team.

OBJECTIVE:

The participants will demonstrate the proper technique in performing the Hailing Method procedure and the Line Search procedure using the required tools, equipment and accessories in the allotted time. The participants will follow the instructor's guidance.

ASSIGNING RESPONSIBILITIES:

The instructors will meet with the group or squads, and assign team leaders who will be in charge of the search for their groups. The instructors will ensure that all participants have their personal protective equipment and a notepad or blank paper and a pen or pencil. If possible, work the teams in groups of six, and then rotate the next crew in.

PROCEDURE:

The technique and the equipment, including the forms required, will be covered in the classroom. In the field, the instructors will explain then briefly demonstrate the proper procedure before the participants practice and are evaluated. Once explained, each group leader will lead the exercise, under guidance of the instructor.

Part One:

Once the participants are at the station and the exercise has been explained and demonstrated, the Hailing Method procedure will be performed by the participants following the steps outlined below:

1. The search/ recon team arrives at the site, and secures the scene.
2. The team obtains pertinent available information from the structure markings (INSARAG) and assigns his group to set up for a hasty hailing method search. The group leader will utilize the Site Sketch Form and make a diagram of the structure. He will interview any witnesses present. An instructor may act as a witness, this must be coordinated before the station, and the information he/she provides should be minimal.
3. The team leader signals for silence and all work to stop around the area. The members of the team will take positions around the selected area or structure. They should be spaced at intervals of 8-16 metres in safe locations as close as possible to the search area. All participants must have paper and pen/pencil to make a rough sketch of the structure and note the direction of the sound relative to the individual's position. This must be covered in class.

4. Going “around the clock” in a coordinated manner, each searcher calls out loudly or with a megaphone (instructions to the potential victim) “If you can hear me, call out or knock five times on something solid!” Instead of hailing, searchers may also knock on something solid (usually metallic) that is a contiguous part of the debris in order to elicit a response.
5. All searchers then listen and point in the direction of any potential response to the instructions. If more than one searcher hears the sound, the direction in which they point will triangulate on the source of the sound of the victim. This must be noted on the personal notes of the individual hearing the sound (drawn as a line pointing in the direction of the sound relative to the individual position to the structure.). Use a coordinated grid system and/or a the clock system (using north as 12 o’clock).
6. The team leader will complete the Collapsed Structure Search Data Form. Both forms will be turned in to the instructor, and the personal notes from individual searchers will also be collected.

Part Two:

Once the participants are at the station and the exercise has been explained and demonstrated, a hasty or extensive mode, Line (Physical/void) Search procedure using the hailing method will be performed by the participants following the guide below. An instructor will be used as a victim, and when found, victim management steps as learned in class will be followed, along with supporting documentation.

1. The search/reconnaissance team arrives at the site and secures the scene.
2. The team obtains pertinent available information from the structure markings (INSARAG) and assigns his group to set up for a Line Search Using the Hailing technique. The group leader will utilize the Site Sketch Form and make a diagram of the structure. He will interview any witnesses present. (An instructor may act as a witness, this must be coordinated before the station, and the information he provides should be minimal.)
3. The team leader signals for silence and all work to stop around the area. The members of the team will spread across the rubble pile, building or selected area of the structure. They should be spaced at intervals of approximately 4 meters across the search area (or as needed for the particular conditions). (All participants must have paper and pen/pencil to make a rough sketch of the structure and note the direction of the sound relative to the individuals' position. This must be covered in class.)
4. In a coordinated manner, before advancing onto the pile, each searcher (or every other searcher, as needed) calls out loudly or with a megaphone, (instructions to the potential victim), “If you can hear me call out or knock five times on something solid!” Instead of hailing, searchers may also knock on something solid (usually metallic) that is a contiguous part of the debris in order to elicit a response.
5. All searchers then listen and point in the direction of any potential response to the instructions. If more than one searcher hears the sound, the direction in which they point will triangulate on the source of the sound of the victim. This must be noted on the personal notes of the individual hearing the sound (drawn as a line pointing in the direction of the sound relative to the individual position to the structure.). Use a coordinated grid system and/or a the clock system (using north as 12 o'clock).

6. After the necessary number of searchers have hailed and listened for a response, the entire team then advances as safety and conditions on the rubble permit. As they advance, they need to listen and look into accessible void spaces. When they have advanced a short distance, they stop, and the entire scenario is repeated, then the line advances again, until the entire pile is covered. It is very important that team members maintain a line formation consistently, or they may miss an area.
7. The victim (instructor), will allow the team to make several entire line moves, as time permits, before responding to them. Once the team has located the victim, they will follow the steps outlined in the lesson for initial contact with a victim. The appropriate paperwork will be collected as before.

Equipment, Tools and Accessories		
Equipment	**Tools**	**Accessories**
Personal protective equipment Drinking water Portable radio Paint, chalk	Basic hand tools (as needed, e.g. Hammer)	Megaphone Whistle Horn Collapsed structure Search Data form (CSSD form) Site Area/Sketch Plan forms

REQUIRED MATERIALS *(Refer to Coordinator's Manual):*
These materials are suggestions. If they are unavailable, you may substitute a similar material.

- Flip chart paper
- Tape (to post markings on building)

INSTRUCTORS:

- 1 Instructor
- 1Assistant Instructor

TIME:

- 2 hours

Collapsed Structure
Search Data Form

DATE	**CSSR TEAM IDENTIFICATION**
TIME	**NAME OR DESCRIPTION OF STRUCTURE**
DATE OF COLLAPSE	**LOCATION OF STRUCTURE**
TIME OF COLLAPSE	**OCCUPANTS AT TIME OF COLLAPSE** APPROXIMATE # OCCUPANTS _____

OCCUPANCY TYPE AT TIME OF COLLAPSE

☐ RESIDENTIAL ☐ COMMERCIAL ☐ INDUSTRIAL

☐ OTHER / DESCRIBE: _____

STRUCTURAL TYPE

☐ LIGHT FRAME ☐ PRE-FAB/TILT-UP CONCRETE

☐ HEAVY WALL ☐ HEAVY FLOOR

FLOORS _____ # OF COLUMNS _____ BLUEPRINT OR PHOTO AVAILABLE?_____

STRUCTURAL ENGINEER ASSESSMENT

NAME: ----------

IDENTIFICATION: ----------

CONDITION OF STRUCTURE: ----------

CUT OFF SERVICES: ☐ WATER ☐ ELECTRICITY ☐ GAS

RESCUE INFORMATION (SEE RESCUE VICTIM IDENTIFICATION FORM)

RESCUED _____ # BODIES RECOVERED _____

Previous Rescue Team Efforts

Team Name / ID	Leader's Name	Contact Information

Structure Information Form

(Attach this form to the Site Sketch Form.)

Potential Dangers Present

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Confirmed Dangers

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Personnel Available for Searching

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Equipment Available

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Relatives, Neighbours, Witnesses, Residents or Building Personnel with Possible Information on Trapped Victims

Full Name	How Associated with the Building	Location	Information Supplied

Victim Identification Form

Rescued Victims

Full Name of Victim or other identifying information	Date	Time	Place	Rescuer's Identity

Recovered Bodies

Full Name of Victim or other identifying information	Date	Time	Place	Rescuer's Identity